

FORM PTO-1449 (Modified)	JUL 19 2004	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.: COOL-02100	Serial No.: 10/769,717
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))			Applicants: Douglas Werner et al.	
			Filing Date: January 29, 2004	Group Art Unit: 3753

FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

	Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation	
						Yes	No
TJW	AA	97212126.9	03/04/97	CN	B01D	61/42	X
TJW	AB	2000-277540	10/06/00	JP	H01L	21/50	X

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

TJW	AC	Stephen C. Jacobson et al., "Fused Quartz Substrates for Microchip Electrophoresis", Analytical Chemistry, Vo. 67, No. 13, July 1, 1995, pages 2059-2063.
TJW	AD	Kendra V. Sharp et al., "Liquid Flows in Microchannels", 2002, Vol. 6, pages 6-1 to 6-38.
TJW	AE	Shuchi Shoji et al., "Microflow devices and systems", J. Microech. Microeng. 4 (1994), pages 157-171, printed in the U.K.
TJW	AF	Angela Rasmussen et al., "Fabrication Techniques to Realize CMOS-Compatible Microfluidic Microchannels", Journal of Microelectromechanical, Vo. 10, No. 2, June 2001, pages 286-297.
TJW	AG	J. H. Wang et al., "Thermal-Hydraulic Characteristic of Micro Heat Exchangers", 1991, DSC-Vol. 32, Micromechanical Sensors, Actuators, and Systems, pages 331-339.
TJW	AH	Gad Hetsroni et al., "Nonuniform Temperature Distribution in Electronic Devices Cooled by Flow in Parallel Microchannels", IEEE Transactions on Components and Packaging Technologies, March 2001, Vol. 24, No. 1, pages 16-23.
TJW	AI	X. F. Peng et al., "Heat Transfer Characteristics of Water Flowing through Microchannels", Experimental Heat Transfer An International Journal, Vol. 7, No. 4; October-December 1994, pages 265-283.
TJW	AJ	Linan Jiang et al., "Forced Convection Boiling in a Microchannel Heat Sink", Journal of Microelectromechanical Systems, Vol. 10, No. 1, March 2001, pages 80-87.
TJW	AK	Muhammad M. Rahman et al., "Experimental Measurements of Fluid Flow and Heat Transfer in Microchannel Cooling Passages in a Chip Substrate", 1993, EEP-Vol. 4-2, Advances in Electronic Packages, pages 685-692.
TJW	AL	X. F. Peng et al., "Forced convection and flow boiling heat transfer for liquid flowing through Microchannels", 1993, Int. J. Heat Mass Transfer, Vol. 36, NO. 14, pages 3421-3427.
TJW	AM	Lung-Jieh Yang et al., "A Micro Fluidic System of Micro Channels with On-Site Sensors by Silicon Bulk Micromaching", September 1999, Microfluidic Devices and Systems II, Vol. 3877, pages 267-272.
TJW	AN	G. Mohiuddin Mala et al., "Heat transfer and fluid flow in microchannels", 1997, Int. J. Mass transfer, Vol. 40, No. 13, pages 3079-3088, printed in Great Britain.
TJW	AO	J. M. Cuta et al., "Fabrication and Testing of Micro-Channel Heat Exchangers", SPIE Microlithography and Metrology in Micromaching, Vol. 2640, 1995, pages 152-160.
TJW	AP	Linan Jiang et al., "A Micro-Channel Heat Sink with Integrated Temperature Sensors for Phase Transition Study", 1999, 12 th IEEE International Conference on Micro Electro Mechanical Systems, pages 159-164.
TJW	AQ	Linan Jiang et al., "Fabrication and characterization of a microsystem for a micro-scale heat transfer study", J. Micromech. Microeng. 9 (1999) pages 422-428, printed in the U.K.
TJW	AR	M. B. Bowers et al., "High flux boiling in low flow rate, low pressure drop mini-channel and micro-channel heat sinks", 1994, Int. J. Heat Mass Transfer, Vol. 37, No. 2, pages 321-332.
TJW	AS	Yongendra Joshi, "Heat out of small packages", December 2001, Mechanical Engineer, pages 56-58.
TJW	AT	A. Rostami et al., "Liquid Flow and Heat Transfer in Microchannels: a Review", 2000, Heat and Technology, Vol. 18, No. 2, pages 59-68.
TJW	AU	Lian Zhang et al., "Measurements and Modeling of Two-Phase Flow in Microchannels with Nearly Constant Heat Flux Boundary Conditions", Journal of Microelectromechanical Systems, Vol.11, No. 1, February 2002, pages 12-19.
TJW	AV	Muhammad Mustafizur Rahman, "Measurements of Heat Transfer in Microchannel Heat Sinks", Int. Comm. Heat Mass Transfer, Vol. 27, No. 4, May 2000, pages 495-506.
TJW	AW	Issam Mudawar et al., "Enhancement of Critical Heat Flux from High Power Microelectronic Heat Sources in a Flow Channel", Journal of Electronic Packaging, September 1990, Vol. 112, pages 241-248.
TJW	AX	Nelson Kuan, "Experimental Evaluation of Micro Heat Exchangers Fabricated in Silicon", 1996, HTD-Vol. 331, National Heat Transfer Conference, Vol. 9, pages 131-136.
TJW	AY	E. W. Kreutz et al., "Simulation of micro-channel heat sinks for optoelectronic Microsystems", Microelectronics Journal 31(2000) pages 787-790.
TJW	AZ	J. C. Y. Koh et al., "Heat Transfer of Microstructure for Integrated Circuits", 1986, Int. Comm. Heat Mass Transfer, Vol. 13, pages 89-98.
TJW	BA	Snezana Konecni et al., "Convection Cooling of Microelectronic Chips", 1992, InterSociety Conference on Thermal Phenomena, pages 138-144.

Examiner: <i>J. Waller</i>	Date Considered: <i>1/19/05</i>
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OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)					
TJW	BB	Michael B. Kleiner et al., "High Performance Forced Air Cooling Scheme Employing Microchannel Heat Exchangers", 1995, IEEE Transactions on Components, Packaging, and Manufacturing Technology-Part A, Vol. 18, No. 4, pages 795-804.			
TJW	BC	Jerry K. Keska Ph. D. et al., "An Experimental Study on an Enhanced Microchannel Heat Sink for Microelectronics Applications", EEP-Vol. 26-2, Advances in Electronic Packaging, 1999, Vol. 2, pages 1235-1259.			
TJW	BD	Shung-Wen Kang et al., "The Performance Test and Analysis of Silicon-Based Microchannel Heat Sink", July 1999, Terahertz and Gigahertz Photonics, Vol. 3795, pages 259-270.			
TJW	BE	Joseph C. Tramontana, "Semiconductor Laser Body Heat Sink", Xerox Disclosure Journal, Vol. 10, No. 6, November/December 1985, pages 379-381.			
TJW	BF	Sarah Arulanandam et al., "Liquid transport in rectangular microchannels by electroosmotic pumping", Colloid and Surfaces A: Physicochemical and Engineering Aspects 161 (2000), pages 89-102.			
TJW	BG	Jeffery D. Barner et al., "Thermal Ink Jet Print Head Carriage with Integral Liquid Cooling Capabilities", Xerox Disclosure Journal-Vol. 21, No. 1, January/February 1996, pages 33-34.			
TJW	BH	"Autonomous displacement of a solution in a microchannel by another solution", Research Disclosure, June 2001, pages 1046-1047.			
TJW	BI	John M. Waldvogel, "Aluminum Silicon Carbide Phase Change Heat Spreader", Motorola, June 1999, Technical Developments, pages 226-230.			
TJW	BJ	James P. Slupe et al., "An idea for maintaining a stable thermal environment for electronic devices", Research Disclosure, August 2001, page 1312.			
TJW	BK	John M. Waldvogel, "A Heat Transfer Enhancement Method for Forced Convection Bonded-Fin Heatsinks", Motorola, December 1997, Technical Developments, pages 158-159.			
TJW	BL	"Thin Heat Pipe for Cooling Components on Printed Circuit Boards", IBM Technical Disclosure Bulletin, Vol. 34, No. 7B, December 1991, pages 321-322.			
TJW	BM	R. C. Chu et al., "Process for Nucleate Boiling Enhancement", IBM Technical Disclosure Bulletin, Vol. 18, No. 7, December 1975, page 2227.			
TJW	BN	J. Riseman, "Structure for Cooling by Nucleate Boiling", IBM Technical Disclosure Bulletin, Vol. 18, No. 11, April 1976, page 3700.			
TJW	BO	"Integrally Grooved Semiconductor Chip and Heat Sink", October 1971, IBM Technical Disclosure Bulletin, Vol. 14, No. 5, page 1425.			
TJW	BP	"Enhanced Cooling of Thermal Conduction Module", IBM Technical Disclosure Bulletin, Vol. 30, No. 5, October 1987, page 426.			
TJW	BQ	"Heat Exchanger Modules for Data Process with Valves Operated by Pressure from Cooling Water Pump", IBM Technical Disclosure Bulletin, Vol. 30, No. 5, October 1987, page 419.			
TJW	BR	"Cold Plate for Thermal Conduction Module with Inlet for Cooling Water Near Highest Power Chips", IBM Technical Disclosure Bulletin, Vol. 30, No. 5, October 1987, page 413.			
TJW	BS	"Circuit Module Cooling with Coaxial Bellow Providing Inlet, Outlet and Redundant Connections to Water-Cooled Element", IBM Technical Bulletin, Vol. 30, No. 5, October 1987, pages 345-347.			
TJW	BT	"Piping System with Valves Controlled by Processor for Heating Circuit Modules in a Selected Temperature Profile for Sealing Integrity Test Under Temperature Stress", IBM Technical Disclosure Bulletin, Vol. 30, No. 5, October 1987, page 336.			
TJW	BU	"Cooling System for Chip Carrier on Card", IBM Technical Disclosure Bulletin, Vol. 31, No. 4, September 1988, pages 39-40.			
TJW	BV	"Chip Cooling Device", IBM Technical Disclosure Bulletin, Vol. 30, No. 9, February 1988, pages 435-436.			
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TJW	BX	N. P. Bailey et al., "Cooling Device for Controlled Rectifier", IBM Technical Disclosure Bulletin, Vol. 21, No. 11, April 1979, pages 4609-4610.			
TJW	BY	W. J. Kleinfelder et al., "Liquid-Filled Bellows Heat Sink", IBM Technical Disclosure Bulletin, Vol. 21, No. 10, March 1979, pages 4125-4126.			
TJW	BZ	R. P. Chrisfield et al., "Distributed Power/Thermal Control", IBM Technical Disclosure Bulletin, Vol. 22, No. 3, August 1979, pages 1131-1132.			
TJW	CA	A. J. Arnold et al., "Heat Sink Design for Cooling Modules in a Forced Air Environment", IBM Technical Disclosure Bulletin, Vol. 22, No. 6, November 1979, pages 2297-2298.			
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TJW	CC	U. P. Hwang et al., "Cold Plate for Thermal Conduction Module with Improved Flow Pattern and Flexible Base", IBM Technical Disclosure Bulletin, Vol. 25, No. 9, February 1983, page 4517.			
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Examiner: <i>TJW/Alford</i>	Date Considered: <i>1/19/05</i>				
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TJW	CF	J. M. Eldridge et al., "Heat-Pipe Vapor Cooling Etched Silicon Structure", IBM Technical Disclosure Bulletin, Vol. 25, No. 8, January 1983, pages 4118-4119.
TJW	CG	J. R. Skobem, "Thermoelectrically Cooled Module", IBM Technical Disclosure Bulletin, Vol. 27, No. 1A, June 1984, page 30.
TJW	CH	M. J. Brady et al., "Etched Silicon Integrated Circuit Heat Sink", IBM Technical Disclosure Bulletin, Vol. 27, No. 1B, June 1984, page 627.
TJW	CI	H. D. Edmonds et al., "Heat Exchange Element for Semiconductor Device Cooling", IBM Technical Disclosure Bulletin, Vol. 23, No. 3, August 1980, page 1057.
TJW	CJ	R. W. Noth, "Heat Transfer from Silicon Chips and Wafers", IBM Technical Disclosure Bulletin, Vol. 17, No. 12, May 1975, page 3544.
TJW	CK	"Forced Boiling Cooling System with Jet Enhancement for Critical Heat Flux Extension", IBM Technical Disclosure Bulletin, Vol. 39, No. 10, October 1996, page 143.
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TJW	CM	"Self-Contained Active Heat Dissipation Device", IBM Technical Disclosure Bulletin Vol. 39, No. 04, April 1996, pages 115-116.
TJW	CN	C. J. Keller et al., "Jet Cooling Cup for Cooling Semiconductor Devices", IBM Technical Disclosure Bulletin, Vol. 20, No. 9, February 1978, pages 3575-3576.
TJW	CO	B. J. Ronkese, "Centerless Ceramic Package with Directly Connected Heat Sink", IBM Technical Disclosure Bulletin, Vol. 20, No. 9, February 1978, page 3577-3578.
TJW	CP	K. S. Sachar, "Liquid Jet Cooling of Integrated Circuit Chips", Vol. 20, No. 9, February 1978, pages 3727-3728.
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TJW	CR	A. L. Pacuzzo et al., "Integrated Circuit Module Package Cooling Structure", IBM Technical Disclosure Bulletin, Vol. 20, No. 10, March 1978, pages 3898-3899.
TJW	CS	R. D. Durand et al., "Flexible Thermal Conductor for Electronic Module", IBM Technical Disclosure Bulletin, Vol. 20, No. 11A, April 1978, page 4343.
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TJW	CY	V. Y. Doo et al., "High Performance Package for Memory", IBM Technical Disclosure Bulletin, Vol. 21, No. 2, July 1978, pages 585-586.
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TJW	DD	"Circuit Module Cooling with Multiple Pistons Contacting a Heat Spreader/Electrical Buffer Plate in Contact with Chip", IBM Technical Disclosure Bulletin, Vol. 31, No. 12, May 1989, page 5-7.
TJW	DE	"TCM-LIKE Circuit Module with Local Heat Sink Resting on Chip and Chip Separated From Coolant by Bellows with Pins and Deflector Plate Attached to Local Heat Sink and Extending Above Bellows into Region of Coolant Flow", IBM Technical Disclosure Bulletin, Vol. 31, No. 11, pages 305-306.
TJW	DF	"Water-Cooled Circuit Module with Grooves Forming Water Passages Near Heat-Producing Devices", IBM Technical Disclosure Bulletin, Vol. 31, No. 12, May 1989, pages 49-50.
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Examiner: *J. Mallory*Date Considered: *1/19/05*

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TJW	DI	"Means of Removing More Heat From a TCM (Or Other Liquid-Cooled Logic Package) By Reducing the Coolant Temperature", IBM Technical Disclosure Bulletin, Vol. 32 No. 5A, Oct 1989, pages 153-154.		
TJW	DJ	E. G. Loeffel et al., "Liquid Cooled Module with Compliant Membrane", IBM Technical Disclosure Bulletin, Vol. 20, No. 2, July 1977, pages 673-674.		
TJW	DK	V. Y. Doo et al., "Method of Effective Cooling of a High Power Silicon Chip", IBM Technical Disclosure Bulletin, Vol. 20, No. 4, September 1977, page 1436-1437.		
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TJW	DU	Haim H. Bau, <u>Optimization of conduits' shape in micro heat exchangers</u> , December 10, 1997, International Journal of Heat and Mass Transfer 41 (1998), pages 2717-2723.		
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TJW	DW	M. B. Bowers et al., <u>Two-Phase Electronic Cooling Using Mini-Channel and Micro-Channel Heat Sinks: Part 2-Flow Rate and Pressure Drop Constraints</u> , December 1994, Journal of Electronic Packaging 116, pages 298-305.		
TJW	DX	Meint J. de Boer et al., <u>Micromachining of Buried Micro Channels in Silicon</u> , March 2000, Journal of Microelectromechanical systems, Vol. 9, No. 1, pages 94-103.		
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TJW	EE	John Gooding, <u>Microchannel heat exchangers - a review</u> , SPIE Vol. 1997 High Heat Flux Engineering II (1993), pages 66-82.		
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TW	EH	George M. Harpole et al., <u>MICRO-CHANNEL HEAT EXCHANGER OPTIMIZATION</u> , 1991, Seventh IEEE SEMI-THERM Symposium, pages 59-63.
PW	EI	Pei-Xue Jiang et al., <u>Thermal-hydraulic performance of small scale micro-channel and porous-media heat-exchangers</u> , 2001, International Journal of Heat and Mass Transfer 44 (2001), pages 1039-1051.
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TW	EN	T.S. Raviguruajan et al., <u>Single-Phase Flow Thermal Performance Characteristics of a Parallel Micro-Channel Heat Exchanger</u> , 1996, HTD-Vol. 329, National Heat Transfer Conference, Volume 7, ASME 1996, pages 157-166
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PW	FI	Gh. Mohiuddin Mala et al., <u>Flow characteristics of water through a microchannel between two parallel plates with electrokinetic effects</u> , 1997, Int. J. Heat and Fluid Flow, Vol. 18, No. 5, pages 489-496
Examiner: <i>J.M. Wallerdy</i>	Date Considered:	1/19/05
EXAMINER:	Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

FORM PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))			U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.: COOL-02100	Serial No.: 10/769,717
			Applicants: Douglas Werner et al.		
			Filing Date: January 29, 2004	Group Art Unit: 3753	
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)					
TJW	FJ	W. E. Morf et al., <u>Partial electroosmotic pumping in complex capillary systems Part I: Principles and general theoretical approach</u> , October 16, 2000, Sensors and Actuators B 72 (2001), pages 266-272.			
TJW	FK	M. Esashi, <u>Silicon micromachining and micromachines</u> , September 1, 1993, Wear, Vol. 168, No. 1-2, (1993), pages 181-187.			
TJW	FL	Stephanus Buttgenbach et al., <u>Microflow devices for miniaturized chemical analysis systems</u> , November 4-5, 1998, SPIE-Chemical Microsensors and Applications, Vol. 3339, pages 51-61.			
TJW	FM	Sarah Arunlanandam et al., <u>Liquid transport in rectangular microchannels by electroosmotic pumping</u> , 2000, Colloids and Surfaces A: Physicochemical and Engineering Aspects Vol. 161 (2000), pages 89-102.			
TJW	FN	Linan Jiang et al., <u>Closed-Loop Electroosmotic Microchannel Cooling System for VLSI Circuits</u> , Mechanical Engineering Dept. Stanford University, pages 1-27.			
TJW	FO	Susan L. R. Barker et al., <u>Fabrication, Derivatization and Applications of Plastic Microfluidic Devices</u> , Proceedings of SPIE, Vol. 4205, November 5-8, 2000, pages 112-118.			
TJW	FP	Timothy E. McKnight et al., <u>Electroosmotically Induced Hydraulic Pumping with Integrated Electrodes on Microfluidic Devices</u> , 2001, Anal. Chem., Vol. 73, pages 4045-4049.			
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TJW	FR	Frank Wagner et al., <u>Electroosmotic Flow Control in Micro Channels Produced by Scanning Excimer Laser Ablation</u> , 2000, Proceedings of SPIE Vol. 4088, June 14-16, 2000, pages 337-340.			
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TJW	GI	Roger S. Stanley et al., <u>Two-Phase Flow in Microchannels</u> , 1997, DSE-Vol. 62/HTD-Vol. 354, MEMS, pages 143-152.			
TJW	GJ	B. X. Wang et al., <u>Experimental investigation on liquid forced-convection heat transfer through microchannels</u> , 1994, Int. J. Heat Mass Transfer, Vol. 37 Suppl. 1, pages 73-82.			
TJW	GK	Kambiz Vafai et al., <u>Analysis of two-layered micro-channel heat sink concept in electronic cooling</u> , 1999, Int. J. Heat Mass Transfer, 42 (1999), pages 2287-2297.			
Examiner:	<u>D.J. Wallberg</u>		Date Considered:	<u>1/19/05</u>	
EXAMINER:	Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))		Applicants: Douglas Werner et al.		
		Filing Date: January 29, 2004		Group Art Unit: 3753
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)				
TSW	GL	Gokturk Tunc et al., Heat transfer in rectangular microchannels, 2002, Int. J. Heat Mass Transfer, 45 (2002), pages 765-773.		
TSW	GM	D. B. Tuckerman et al., High-Performance Heat Sinking for VLSI, 1981, IEEE Electron Device Letters, Vol. EDL-2, No. 5, pages 126-129.		
TSW	GN	Bengt Sundén et al., An Overview of Fabrication Methods and Fluid Flow and Heat Transfer Characteristics of Micro Channels, pages 3-23.		
TSW	GO	David S. Shen et al., Micro Heat Spreader Enhance Heat Transfer in MCMs, 1995, IEEE Multi-Chip Module Conference, pages 189-194.		
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TSW	GT	X.F. Peng et al., "Enhancing the Critical Heat Flux Using Microchanneled Surfaces", Enhanced Heat Transfer, 1998, Vol. 5 pp. 165-176.		
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Examiner:	<i>D.Werner</i>		Date Considered: 1/19/05	
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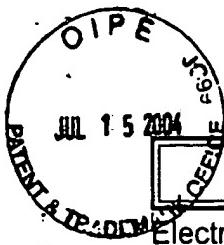
Title of Invention:	HERMETIC CLOSED LOOP FLUID SYSTEM				
Application Number:	10/769717 				
Confirmation Number:	8804				
First Named Applicant:	Douglas Werner				
Attorney Docket Number:					
Search string:	(5759014 or 5763951 or 5800690 or 5801442 or 5835345 or 5836750 or 5858188 or 5863708 or 5869004 or 5870823 or 5874795 or 5876655 or 5880017 or 5880524 or 5936192 or 5940270 or 5942093 or 5964092 or 5965001 or 5965813 or 5978220 or 5997713 or 5998240 or 6007309 or 6010316 or 6013164 or 6019882 or 6068752 or 6090251 or 6096656 or 6100541 or 6101715 or 6119729 or 6126723 or 6129145 or 6131650 or 6146103 or 6154363 or 6159353 or 6171067 or 6174675 or 6176962 or 6186660 or 6210986 or 6216343 or 6221226 or 6227809 or 6277257 or 6287440 or 6301109).pn.				
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Note: Applicant is not required to submit a paper copy of cited US Patent Documents					
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TM	49	6287440	2001-09-11	Arnold et al.	B1
TM	50	6301109	2001-10-09	Chu et al.	B1

Signature

Examiner Name	Date
D.Walther	1/19/05



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

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Title of Invention	HERMETIC CLOSED LOOP FLUID SYSTEM				
Application Number:	10/769717 				
Confirmation Number:	8804				
First Named Applicant:	Douglas Werner				
Attorney Docket Number:					
Search string:	(6313992 or 6317326 or 6321791 or 6322753 or 6324058 or 6351384 or 6337794 or 6388317 or 6400012 or 6406605 or 6415860 or 6416642 or 6417060 or 6424531 or 6443222 or 6444461 or 6457515 or 6495015 or 6537437 or 6543521 or 6553253 or 6572749 or 6588498 or 6591625 or 6632655 or 20010016985 or 20010024820 or 20010044155 or 20010045270 or 20010046703 or 20010055714 or 20020011330).pn.				
US Patent Documents					
Note: Applicant is not required to submit a paper copy of cited US Patent Documents					
init	Cite.No.	Patent No.	Date	Patentee	Kind
TW	1	6313992	2001-11-06	Hildebrandt	B1
TW	2	6317326	2001-11-13	Vogel et al.	B1
TW	3	6321791	2001-11-27	Chow	B1
TW	4	6322753	2001-11-27	Lindberg et al.	B1
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TW	6	6351384	2002-02-26	Daikoku et al.	B1
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TJW	16	6444461	2002-09-03	Knapp et al.	B1
TJW	17	6457515	2002-10-01	Vafai et al.	B1
TJW	18	6495015	2002-12-17	Schoeniger et al.	B1
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TJW	20	6543521	2003-04-08	Sato et al.	B1
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TJW	25	6632655	2003-10-14	Mehta et al.	B1

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
TJW	1	20010016985	2001-08-30	Insley et al.	A1		
TJW	2	20010024820	2001-09-27	Mastromatteo et al.	A1		
TJW	3	20010044155	2001-11-22	Paul et al.	A1		
TJW	4	20010045270	2001-11-29	Bhatti et al.	A1		
TJW	5	20010046703	2001-11-29	Burns et al.	A1		
TJW	6	20010055714	2001-12-27	Cettour-Rose et al.	A1		
TJW	7	20020011330	2002-01-31	Insley et al.	A1		

Signature

Examiner Name	Date
	1/19/05